GenCore version 5.1.3

OM protein - protein search, using sw model

Run on: December 5, 2002, 13:18:38 ; Search time 38 Seconds
(without alignments)
1171.203 Million cell updates/sec

Title: US-09-765-034-2
Perfect score: 1747
Sequence: 1 MLGIMAWNATCKNWLAAEAA.....KSLTSFSRWAHELLLSFREK 334

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 908470 seqs, 133250620 residues

Total number of hits satisfying chosen parameters: 908470

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : A_Geneseq_101002:*
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	% Query Match	Length	DB	ID	Description
1	1737	99.4	334	21	AAY71308	Human orphan G pro
2	1737	99.4	334	21	AAB02842	Human G protein co
3	1737	99.4	334	23	ABB90381	Human polypeptide
4	1737	99.4	379	23	AAE15633	Human G-protein co
5	1725	98.7	334	18	AAW19854	Human purinergic r
6	1721	98.5	334	18	AAW22732	Human ATP receptor
7	1696	97.1	387	22	AAU31029	Novel human secret
8	1333	76.3	258	21	AAB45376	Human secreted pro
9	1231.5	70.5	317	23	AAU74904	Amino acid sequenc
10	499.5	28.6	373	23	AAU10984	Purinergic recepto
11	497.5	28.5	373	22	AAE04389	Human P2-purinergi
12	497.5	28.5	373	23	AAU10983	Purinergic recepto
13	490.5	28.1	373	23	AAU10985	Purinergic recepto
14	477	27.3	337	22	AAU04375	Human G-protein co
15	477	27.3	337	23	AAO15399	Human G protein-co
16	477	27.3	337	23	ABB81902	Human G-protein co
17	477	27.3	337	23	ABB83819	Human P2Y-like rec
18	477	27.3	337	23	AAE21803	Human AXOR89 (G-pr
19	477	27.3	337	23	ABB79438	Human P2Y1-li. Ho
20	477	27.3	337	23	AAU77600	Human P2Y1-like G
21	477	27.3	337	23	AAO14027	Human purinergic-r
22	477	27.3	337	23	AAE16171	Human G-protein co
23	475	27.2	374	22	AAE04390	Turkey P2Y nucleot
24	470	26.9	337	22	AAU04584	Human G-protein co
25	429.5	24.6	259	21	AAB45375	Gene 37 human secr
26	420.5	24.1	336	22	AAG80971	Human nGPCR54 #2.
27	405	23.2	537	23	AAU74538	Human P2Y purinoce
28	395.5	22.6	276	23	ABB83818	Human P2Y-like rec
29	386	22.1	373	23	AAE20604	Mus musculus GPCR
30	385	22.0	377	22	AAE04392	Human P2-purinergi
31	385	22.0	377	22	AAE01143	Human purinergic r
32	385	22.0	377	22	AAE01144	Human purinergic r
33	384	22.0	330	23	AAG77964	Human G-protein co
34	384	22.0	341	22	AAE07539	Human G-protein co
35	384	22.0	346	22	AAE12022	Human G-protein co
36	384	22.0	346	22	AAB82852	Human P2Y-like GPC
37	384	22.0	346	22	AAE07538	Human G-protein co
38	384	22.0	346	22	AAU04368	Human G-protein co
39	384	22.0	346	22	AAU07294	Cysteinyl leukotri
40	384	22.0	346	22	AAB73097	Human LTC4 recepto
41	384	22.0	346	23	ABG66684	Human novel polype
42	384	22.0	346	23	AAU10004	Human CysLT2-like
43	384	22.0	346	23	AAE17231	Human CysLT2 GPCR
44	384	22.0	346	23	AAG77965	Human G-protein co
45	384	22.0	346	23	ABB05229	Human LTD4-like G

ALIGNMENTS

RESULT 1
AAY71308
ID AAY71308 standard; Protein; 334 AA.
XX
AC AAY71308;
XX
DT 02-NOV-2000 (first entry)
XX
DE Human orphan G protein-coupled receptor hCHN10.
XX
KW Human; orphan G protein-coupled receptor; GPCR; hCHN10; drug screening;
KW transmembrane receptor; expressed sequence tag; EST; signal cascade.
XX
OS Homo sapiens.
XX
PN WO200031258-A2.
XX
PD 02-JUN-2000.
XX
PF 13-OCT-1999; 99WO-US23687.
XX
PR 20-NOV-1998; 98US-0109213.
PR 16-FEB-1999; 99US-0120416.
PR 26-FEB-1999; 99US-0121852.
PR 12-MAR-1999; 99US-0123946.
PR 12-MAR-1999; 99US-0123949.
PR 28-MAY-1999; 99US-0136436.
PR 28-MAY-1999; 99US-0136437.
PR 28-MAY-1999; 99US-0136439.
PR 28-MAY-1999; 99US-0136567.
PR 28-MAY-1999; 99US-0137127.
PR 28-MAY-1999; 99US-0137131.
PR 29-JUN-1999; 99US-0141448.

PR 29-SEP-1999; 99US-0156555.
PR 29-SEP-1999; 99US-0156633.
PR 29-SEP-1999; 99US-0156634.
PR 29-SEP-1999; 99US-0156653.
PR 01-OCT-1999; 99US-0157280.
PR 01-OCT-1999; 99US-0157281.
PR 01-OCT-1999; 99US-0157282.
PR 01-OCT-1999; 99US-0157293.
PR 01-OCT-1999; 99US-0157294.
PR 12-OCT-1999; 99US-0416760.
PR 12-OCT-1999; 99US-0417044.
XX
PA (AREN-) ARENA PHARM INC.
XX
PI Chen R, Dang HT, Liaw CW, Lin I;
XX
DR WPI; 2000-400068/34.
DR N-PSDB; AAD01135.
XX
PT Novel human orphan G protein-coupled receptors and the encoding cDNAs
PT for use in the identification of G protein-coupled receptor agonists -
XX
PS Claim 70; Page 87-88; 102pp; English.
XX
CC The present amino acid sequence is the hCHN10, an endogenous human
CC orphan G protein-coupled receptor (GPCR), expressed in kidney and
CC thyroid. The hCHN10 cDNA was identified using the human EST (expressed
CC sequence tag) 1365839 as a probe. The orphan GPCR of the invention, like
CC all GPCRs has seven transmembrane alpha helices with an extracellular
CC N-terminus and an intracellular C-terminus. However, no endogenous
CC ligands has yet been identified for the proteins of the invention. The
CC orphan GPCRs may be used in the identification of their endogenous
CC ligands, and to screen potential GPCR agonists and antagonists for use as
CC pharmaceutical agents. The proteins may also be used in the study of
CC GPCR-mediated signalling cascades, and to elucidate their precise role in
CC normal and diseased human conditions. Nucleic acid encoding human orphan
CC GPCRs may be used for tissue localisation expression analysis to provide
CC information about their function in healthy and pathological states.
XX
SQ Sequence 334 AA;

Query Match 99.4%; Score 1737; DB 21; Length 334;
Best Local Similarity 99.7%; Pred. No. 8.2e-172;
Matches 333; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

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Qy       1 MLGIMAWNATCKNWLAAEAALEKYYLSIFYGIEFVVGVLGNTIVVYGYIFSLKNWNSSNI 60
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Db       1 MLGIMAWNATCKNWLAAEAALEKYYLSIFYGIEFVVGVLGNTIVVYGYIFSLKNWNSSNI 60

Qy      61 YLFNLSVSDLAFLCTLPMLIRSYANGNWIYGDVLCISNRYVLHANLYTSILFLTFISIDR 120
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Db      61 YLFNLSVSDLAFLCTLPMLIRSYANGNWIYGDVLCISNRYVLHANLYTSILFLTFISIDR 120

Qy     121 YLIIKYPFREHLLQKKEFAILISLAIWVLVTLELLPILPLINPVITDNGTTCNDFASSGD 180
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     121 YLIIKYPFREHLLQKKEFAILISLAIWVLVTLELLPILPLINPVITDNGTTCNDFASSGD 180

Qy     181 PNYNLIYSMCLTLLGFLIPLFVMCFFYYKIALFLKQRNRQVATALPLEKPLNLVIMAVVI 240
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
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Qy     241 FSVPETPYHVMRNVRIASRLGSWKQYQCTQVVINSFYIVTRPLAFLNSVINPVFYFLLGD 300
          ||| ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     241 FSVLFTPYHVMRNVRIASRLGSWKQYQCTQVVINSFYIVTRPLAFLNSVINPVFYFLLGD 300

Qy     301 HFRDMLMNQLRHNFKSLTSFSRWAHELLLSFREK 334
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Db     301 HFRDMLMNQLRHNFKSLTSFSRWAHELLLSFREK 334
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RESULT 2
AAB02842
ID AAB02842 standard; Protein; 334 AA.
XX
AC AAB02842;
XX
DT 22-AUG-2000 (first entry)
XX
DE Human G protein coupled receptor hCHN10 protein SEQ ID NO:38.
XX
KW Human; G protein coupled receptor; GPCR; transmembrane receptor;
KW identification; agonist; screening; therapeutic; pharmaceutical;
KW mutant.
XX
OS Homo sapiens.
XX
PN WO200022131-A2.
XX
PD 20-APR-2000.
XX
PF 13-OCT-1999; 99WO-US24065.
XX
PR 13-OCT-1998; 98US-0170496.
PR 12-NOV-1998; 98US-0108029.
PR 20-NOV-1998; 98US-0109213.
PR 27-NOV-1998; 98US-0110060.
PR 16-FEB-1999; 99US-0120416.
PR 26-FEB-1999; 99US-0121852.
PR 12-MAR-1999; 99US-0123944.
PR 12-MAR-1999; 99US-0123945.
PR 12-MAR-1999; 99US-0123946.
PR 12-MAR-1999; 99US-0123948.
PR 12-MAR-1999; 99US-0123949.
PR 12-MAR-1999; 99US-0123951.
PR 28-MAY-1999; 99US-0136436.
PR 28-MAY-1999; 99US-0136437.
PR 28-MAY-1999; 99US-0136439.
PR 28-MAY-1999; 99US-0137127.
PR 28-MAY-1999; 99US-0137131.
PR 28-MAY-1999; 99US-0137567.
PR 30-JUN-1999; 99US-0141448.
PR 27-AUG-1999; 99US-0151114.
PR 03-SEP-1999; 99US-0152524.
PR 29-SEP-1999; 99US-0156633.
PR 29-SEP-1999; 99US-0156555.
PR 29-SEP-1999; 99US-0156634.
XX
PA (AREN-) ARENA PHARM INC.
XX
PI Behan DP, Lehmann-Bruinsma K, Chalmers DT, Chen R, Dang HT;
PI Gore M, Liaw CW, Lin I, Lowitz K, White C;
XX
DR WPI; 2000-317986/27.
DR N-PSDB; AAA46036.
XX
PT Non-endogenous, human G protein-coupled receptors for screening
PT receptor, inverse or partial agonists useful as therapeutic agents -
XX
PS Example 1; Page 117-118; 187pp; English.
XX
CC The present invention describes transmembrane receptors, preferably
CC human G protein coupled receptors (GPCR), for which the endogenous
CC ligand is unknown (orphan GPCR receptors). More specifically the present
CC invention relates to non-endogenous, constitutively activated versions
CC of a human GPCR. These non-endogenous human GPCRs can be useful for
CC the direct identification of candidate compounds as receptors agonists,
CC inverse agonists or partial agonists for use as pharmaceutical agents.
CC AAA46017 to AAA46126 and AAB02825 to AAB02859 represent sequences used in
CC the exemplification of the present invention.
XX
SQ Sequence 334 AA;

Query Match 99.4%; Score 1737; DB 21; Length 334;
Best Local Similarity 99.7%; Pred. No. 8.2e-172;
Matches 333; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

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Qy      1 MLGIMAWNATCKNWLAAEAALEKYYLSIFYGIEFVVGVLGNTIVVYGYIFSLKNWNSSNI 60
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Db      1 MLGIMAWNATCKNWLAAEAALEKYYLSIFYGIEFVVGVLGNTIVVYGYIFSLKNWNSSNI 60

Qy     61 YLFNLSVSDLAFLCTLPMLIRSYANGNWIYGDVLCISNRYVLHANLYTSILFLTFISIDR 120
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Db     61 YLFNLSVSDLAFLCTLPMLIRSYANGNWIYGDVLCISNRYVLHANLYTSILFLTFISIDR 120

Qy    121 YLIIKYPFREHLLQKKEFAILISLAIWVLVTLELLPILPLINPVITDNGTTCNDFASSGD 180
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    121 YLIIKYPFREHLLQKKEFAILISLAIWVLVTLELLPILPLINPVITDNGTTCNDFASSGD 180

Qy    181 PNYNLIYSMCLTLLGFLIPLFVMCFFYYKIALFLKQRNRQVATALPLEKPLNLVIMAVVI 240
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Db    241 FSVLFTPYHVMRNVRIASRLGSWKQYQCTQVVINSFYIVTRPLAFLNSVINPVFYFLLGD 300

Qy    301 HFRDMLMNQLRHNFKSLTSFSRWAHELLLSFREK 334
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Db    301 HFRDMLMNQLRHNFKSLTSFSRWAHELLLSFREK 334
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RESULT 3
ABB90381
ID ABB90381 standard; Protein; 334 AA.
XX
AC ABB90381;
XX
DT 24-MAY-2002 (first entry)
XX
DE Human polypeptide SEQ ID NO 2757.
XX
KW Cytostatic; immunosuppressive; nootropic; neuroprotective; antiviral;
KW antiallergic; hepatotropic; antidiabetic; antiinflammatory; antiulcer;
KW vulnerary; anticonvulsant; antibacterial; antifungal; antiparasitic;
KW cardiant; gene therapy; cancer; immune disorder; cardiovascular disorder;
KW neurological disease; infection; human; secreted protein.
XX
OS Homo sapiens.
XX
PN WO200190304-A2.
XX
PD 29-NOV-2001.
XX
PF 18-MAY-2001; 2001WO-US16450.
XX
PR 19-MAY-2000; 2000US-205515P.
XX
PA (HUMA-) HUMAN GENOME SCI INC.
XX
PI Birse CE, Rosen CA;
XX
DR WPI; 2002-122018/16.
DR N-PSDB; ABL90790.
XX
PT Novel 1405 isolated polypeptides, useful for diagnosis, treatment and
PT prevention of neural, immune system, muscular, reproductive,
PT gastrointestinal, pulmonary, cardiovascular, renal and proliferative
PT disorders -
XX
PS Claim 11; SEQ ID NO 2757; 2081pp + Sequence Listing; English.
XX
CC The invention relates to novel genes (ABL89449-ABL90853) and proteins
CC (ABB89040-ABB90444) useful for preventing, treating or ameliorating
CC medical conditions e.g. by protein or gene therapy. The genes are
CC isolated from a range of human tissues disclosed in the specification.
CC The nucleic acids, proteins, antibodies and (ant)agonists are useful
CC in the diagnosis, treatment and prevention of: (a) cancer, e.g. breast
CC and ovarian cancer and other cancers of the adrenal gland, bone, bone
CC marrow, breast, gastrointestinal tract, liver, lung, or urogenital;
CC (b) immune disorders e.g. Addison's disease, allergies, autoimmune
CC haemolytic anaemia, autoimmune thyroiditis, diabetes mellitus, Crohn's
CC disease, multiple sclerosis, rheumatoid arthritis and ulcerative
CC colitis; (c) cardiovascular disorders such as myocardial ischaemias;
CC (d) wound healing; (e) neurological diseases e.g. cerebral anoxia and
CC epilepsy; and (f) infectious diseases such as viral, bacterial, fungal
CC and parasitic infections.
CC Note: The sequence data for this patent did not form part of the
CC printed specification, but was obtained in electronic format directly
CC from WIPO at ftp.wipo.int/pub/published_pct_sequences.
XX
SQ Sequence 334 AA;

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  Query Match             99.4%;  Score 1737;  DB 23;  Length 334;
  Best Local Similarity   99.7%;  Pred. No. 8.2e-172;
  Matches  333;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy      1 MLGIMAWNATCKNWLAAEAALEKYYLSIFYGIEFVVGVLGNTIVVYGYIFSLKNWNSSNI 60
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Db      1 MLGIMAWNATCKNWLAAEAALEKYYLSIFYGIEFVVGVLGNTIVVYGYIFSLKNWNSSNI 60

Qy     61 YLFNLSVSDLAFLCTLPMLIRSYANGNWIYGDVLCISNRYVLHANLYTSILFLTFISIDR 120
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Db     61 YLFNLSVSDLAFLCTLPMLIRSYANGNWIYGDVLCISNRYVLHANLYTSILFLTFISIDR 120

Qy    121 YLIIKYPFREHLLQKKEFAILISLAIWVLVTLELLPILPLINPVITDNGTTCNDFASSGD 180
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Db    121 YLIIKYPFREHLLQKKEFAILISLAIWVLVTLELLPILPLINPVITDNGTTCNDFASSGD 180

Qy    181 PNYNLIYSMCLTLLGFLIPLFVMCFFYYKIALFLKQRNRQVATALPLEKPLNLVIMAVVI 240
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    181 PNYNLIYSMCLTLLGFLIPLFVMCFFYYKIALFLKQRNRQVATALPLEKPLNLVIMAVVI 240

Qy    241 FSVPFTPYHVMRNVRIASRLGSWKQYQCTQVVINSFYIVTRPLAFLNSVINPVFYFLLGD 300
          ||| ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    241 FSVLFTPYHVMRNVRIASRLGSWKQYQCTQVVINSFYIVTRPLAFLNSVINPVFYFLLGD 300

Qy    301 HFRDMLMNQLRHNFKSLTSFSRWAHELLLSFREK 334
          |||||||||||||||||||||||||||||||||||
Db    301 HFRDMLMNQLRHNFKSLTSFSRWAHELLLSFREK 334
```

RESULT 4
AAE15633
ID AAE15633 standard; Protein; 379 AA.
XX
AC AAE15633;
XX
DT 12-MAR-2002 (first entry)
XX
DE Human G-protein coupled receptor-3 (GCREC-3) protein.
XX
KW Human; G-protein coupled receptor-3; GCREC-3; therapy; cancer; stroke;
KW cell proliferative disorder; neurological; epilepsy; Parkinson's disease;
KW Alzheimer's disease; inflammation; thyroiditis; haemolytic anaemia; AIDS;
KW Acquired Immune Deficiency Syndrome; dementia; nootropic; cholelithiasis;
KW multiple sclerosis; atherosclerosis; angina pectoris; gastroenteritis;
KW diabetes; ulcer; viral infection; immunosuppressive.
XX
OS Homo sapiens.
XX
FH Key   Location/Qualifiers
FT Domain   187..206
FT   /label= Transmembrane_domain
FT Domain   234..253
FT   /label= Transmembrane_domain
FT Domain   276..296
FT   /label= Transmembrane_domain
FT Domain   319..342
FT   /label= Transmembrane_domain
XX
PN WO200198351-A2.
XX

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PD   27-DEC-2001.
XX
PF   15-JUN-2001; 2001WO-US19275.
XX
PR   16-JUN-2000; 2000US-212483P.
PR   22-JUN-2000; 2000US-213954P.
PR   29-JUN-2000; 2000US-215209P.
PR   07-JUL-2000; 2000US-216595P.
PR   14-JUL-2000; 2000US-218936P.
PR   19-JUL-2000; 2000US-219154P.
PR   21-JUL-2000; 2000US-220141P.
XX
PA   (INCY-) INCYTE GENOMICS INC.
XX
PI   Lal P, Baughn MR, Hafalia AJA, Nguyen DB, Gandhi AR, Kallick DA;
PI   Griffin JA, Yue H, Khan FA, Patterson C, Lu DAM, Tribouley CM;
PI   Lu Y, Walia NK, Graul R, Yao MG, Yang J, Ramkumar J, Au-Young J;
PI   Elliott VS, Hernandez R, Walsh RT, Borowsky ML, Thornton M, He A;
XX
DR   WPI; 2002-075627/10.
DR   N-PSDB; AAD24958.
XX
PT   Isolated human G-protein coupled receptor polypeptides and the use of
PT   these sequences in the diagnosis, treatment and prevention of diseases
PT   and in the assessment of exogenous compounds on the expression of the
PT   receptors -
XX
PS   Claim 1; Page 115-116; 143pp; English.
XX
CC   The invention relates to isolated human G-protein coupled receptor
CC   (GCREC) polypeptides and their biologically active fragments. GCREC and
CC   protein is useful in treating a disease or condition associated with an
CC   increase or decrease in expression of functional GCREC. The GCREC's are
CC   useful in the diagnosis, treatment and prevention of cell proliferative
CC   disorders (cancer, leukaemia, melanoma); neurological disorders (stroke,
CC   epilepsy, Parkinson's disease, dementia, Alzheimer's disease); autoimmune
CC   inflammatory disorder (thyroiditis, haemolytic anaemia, AIDS, multiple
CC   sclerosis); cardiovascular disorder (atherosclerosis, angina pectoris),
CC   gastrointestinal disorder (ulcer, cholelithiasis, gastroenteritis),
CC   metabolic disorders (diabetes); viral infections (herpes virus) and in
CC   the assessment of the effects of exogenous compounds on the expression
CC   of the nucleic acid and amino acid sequences. The present sequence is
CC   human GCREC-3 protein.
XX
SQ   Sequence   379 AA;

  Query Match             99.4%;  Score 1737;  DB 23;  Length 379;
  Best Local Similarity   99.7%;  Pred. No. 9.7e-172;
  Matches  333;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy       1 MLGIMAWNATCKNWLAAEAALEKYYLSIFYGIEFVVGVLGNTIVVYGYIFSLKNWNSSNI 60
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Db      46 MLGIMAWNATCKNWLAAEAALEKYYLSIFYGIEFVVGVLGNTIVVYGYIFSLKNWNSSNI 105

Qy      61 YLFNLSVSDLAFLCTLPMLIRSYANGNWIYGDVLCISNRYVLHANLYTSILFLTFISIDR 120
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Db     106 YLFNLSVSDLAFLCTLPMLIRSYANGNWIYGDVLCISNRYVLHANLYTSILFLTFISIDR 165

Qy     121 YLIIKYPFREHLLQKKEFAILISLAIWVLVTLELLPILPLINPVITDNGTTCNDFASSGD 180
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     166 YLIIKYPFREHLLQKKEFAILISLAIWVLVTLELLPILPLINPVITDNGTTCNDFASSGD 225

Qy     181 PNYNLIYSMCLTLLGFLIPLFVMCFFYYKIALFLKQRNRQVATALPLEKPLNLVIMAVVI 240
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     226 PNYNLIYSMCLTLLGFLIPLFVMCFFYYKIALFLKQRNRQVATALPLEKPLNLVIMAVVI 285

Qy     241 FSVPFTPYHVMRNVRIASRLGSWKQYQCTQVVINSFYIVTRPLAFLNSVINPVFYFLLGD 300
           ||| ||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     286 FSVLFTPYHVMRNVRIASRLGSWKQYQCTQVVINSFYIVTRPLAFLNSVINPVFYFLLGD 345

Qy     301 HFRDMLMNQLRHNFKSLTSFSRWAHELLLSFREK 334
           |||||||||||||||||||||||||||||||||
Db     346 HFRDMLMNQLRHNFKSLTSFSRWAHELLLSFREK 379
```

```
RESULT 5
AAW19854
ID   AAW19854 standard; Protein; 334 AA.
XX
AC   AAW19854;
XX
DT   11-SEP-1997  (first entry)
XX
DE   Human purinergic receptor P2U2.
XX
KW   P2U2 receptor; purinergic receptor; diagnosis; therapy.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   Domain          1..23
FT                   /label= N-terminal_domain
FT   Domain          24..49
FT                   /label= TMI
FT                   /note= "transmembrane domain I"
FT   Domain          50..60
FT                   /label= ICDI
FT                   /note= "intracellular domain I"
FT   Domain          61..82
FT                   /label= TMII
FT                   /note= "transmembrane domain II"
FT   Domain          83..99
FT                   /label= ECDI
FT                   /note= "extracellular domain I"
FT   Domain          100..119
FT                   /label= TMIII
FT                   /note= "transmembrane domain III"
FT   Domain          120..141
FT                   /label= ICDII
FT                   /note= "intracellular domain II"
FT   Domain          142..161
FT                   /label= TMDIV
FT                   /note= "transmembrane domain IV"
FT   Domain          162..183
FT                   /label= ECDII
FT                   /note= "extracellular domain II"
FT   Domain          184..207
FT                   /label= TMDV
FT                   /note= "transmembrane domain V"
FT   Domain          208..233
FT                   /label= ICDIII
FT                   /note= "intracellular domain III"
FT   Domain          234..256
FT                   /label= TMDVI
FT                   /note= "transmembrane domain VI"
FT   Domain          257..276
FT                   /label= ECDIII
FT                   /note= "extracellular domain III"
FT   Domain          277..300
FT                   /label= TMDVII
FT                   /note= "transmembrane domain VII"
FT   Domain          301..334
FT                   /label= C-terminal_domain
XX
PN   WO9720045-A2.
XX
PD   05-JUN-1997.
XX
PF   08-NOV-1996;   96WO-US18175.
XX
PR   15-NOV-1995;   95US-0559524.
PR   15-NOV-1995;   95US-0006782.
XX
PA   (CORT-) COR THERAPEUTICS INC.
XX
PI   Conley PB,  Jantzen H;
```

```
XX
DR   WPI; 1997-310601/28.
DR   N-PSDB; AAT71900.
XX
PT   New isolated purinergic receptor sub-type  - used to develop
PT   products for diagnosis and therapy, e.g. for screening for agonists
PT   and antagonists which can modulate activation
XX
PS   Claim 1; Fig 1A-B; 36pp; English.
XX
CC   P2U2 receptor (AAW19854) is a novel human purinergic receptor
CC   subtype that is abundantly expressed in kidney and in many cell
CC   lines of megakaryocytic or erythroleukaemic origin and which is
CC   activated by ATP, UDP, UTP and UDP.  Its amino acid sequence was
CC   deduced from a cDNA clone derived from DAMI (ATCC CRL 9792) cells.
CC   P2U2 and its polypeptides can be expressed in host cells and used
CC   to develop diagnostic and therapeutic agents.  Antagonists and
CC   agonists based on the extracellular domains of P2U2 receptor, or
CC   which affect receptor function by binding to one of the
CC   intracellular domains, can be used to treat diseases caused by
CC   aberrant activation of this receptor or to treat diseases whose
CC   symptoms can be ameliorated by stimulating or inhibiting the
CC   activity of the receptor.
XX
SQ   Sequence   334 AA;

  Query Match             98.7%;  Score 1725;  DB 18;  Length 334;
  Best Local Similarity   99.1%;  Pred. No. 1.4e-170;
  Matches  331;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy       1 MLGIMAWNATCKNWLAAEAALEKYYLSIFYGIEFVVGVLGNTIVVYGYIFSLKNWNSSNI 60
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       1 MLGIMAWNATCKNWLAAEAALEKYYLSIFYGIEFVVGVLGNTIVVYGYIFSLKNWNSSNI 60

Qy      61 YLFNLSVSDLAFLCTLPMLIRSYANGNWIYGDVLCISNRYVLHANLYTSILFLTFISIDR 120
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db      61 YLFNLSVSDLAFLCTLPMLIRSYANGNWIYGDVLCISNRYVLHANLYTSILFLTFISIDR 120

Qy     121 YLIIKYPFREHLLQKKEFAILISLAIWVLVTLELLPILPLINPVITDNGTTCNDFASSGD 180
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     121 YLIIKYPFREHLLQKKEFAILISLAIWVLVTLELLPILPLINPVITDNGTTCNDFASSGD 180

Qy     181 PNYNLIYSMCLTLLGFLIPLFVMCFFYYKIALFLKQRNRQVATALPLEKPLNLVIMAVVI 240
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     181 PNYNLIYSMCLTLLGFLIPLFVMCFFYYKIALFLKQRNRQVATALPLEKPLNLVIMAVVI 240

Qy     241 FSVPFTPYHVMRNVRIASRLGSWKQYQCTQVVINSFYIVTRPLAFLNSVINPVFYFLLGD 300
           ||| |||||||||||||||||||||||||||||||| | ||||||||||||||||
Db     241 FSVLFTPYHVMRNVRIASRLGSWKQYQCTQVVINSFYIVTRALGFLNSVINPVFYFLLGD 300

Qy     301 HFRDMLMNQLRHNFKSLTSFSRWAHELLLSFREK 334
           |||||||||||||||||||||||||||||||||
Db     301 HFRDMLMNQLRHNFKSLTSFSRWAHELLLSFREK 334


RESULT 6
AAW22732
ID   AAW22732 standard; Protein; 334 AA.
XX
AC   AAW22732;
XX
DT   07-OCT-1997  (first entry)
XX
DE   Human ATP receptor.
XX
KW   ATP receptor; G-protein coupled receptor; agonist; antagonist.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   Misc-difference 212
FT                   /note= "encoded by TCC"
FT   Misc-difference 235
FT                   /note= "encoded by TCG"
FT   Misc-difference 244
FT                   /label= Unknown
FT                   /note= "encoded by CYT"
XX
PN   WO9724929-A1.
XX
PD   17-JUL-1997.
XX
PF   11-JAN-1996;   96WO-US00392.
XX
PR   11-JAN-1996;   96WO-US00392.
XX
PA   (HUMA-) HUMAN GENOME SCI INC.
XX
PI   Li Y;
XX
DR   WPI; 1997-372505/34.
DR   N-PSDB; AAT75146.
XX
PT   Isolated human ATP receptor - agonists and antagonists of which are
PT   useful in treatment of, e.g. asthma, hypertension, arterial
PT   thrombosis and psychotic and neurological disorders
XX
PS   Claim 15; Fig 1A-C; 53pp; English.
XX
CC   Human ATP receptor (AAW22732) is structurally related to the G
CC   protein-coupled receptor family.  It shows 29.8% identity to a
CC   murine P2u receptor.  Its amino acid sequence was deduced from a
CC   human placental cDNA clone (AAT75146).  Recombinant ATP receptor can
CC   be expressed in bacterial (e.g. E. coli), mammalian (e.g. COS) or
CC   insect (e.g. Sf9) host cells and used to screen for agonists and
CC   antagonists useful in the treatment of conditions related to
CC   underexpression of the receptor (e.g. asthma, Parkinson's disease,
CC   acute heart failure, hypotension, urinary retention and
CC   osteoporosis) or underexpression of the receptor (e.g. arterial
CC   thrombosis, hypertension, thrombolysis, angioplasty, cystic
CC   fibrosis, ulcers, asthma, allergy, benign prostatic hypertrophy,
CC   psychotic and neurological disorders, dyskinesias, endogenous
CC   anorexia and bulimia).
XX
SQ   Sequence   334 AA;

  Query Match             98.5%;  Score 1721;  DB 18;  Length 334;
  Best Local Similarity   98.5%;  Pred. No. 3.7e-170;
  Matches  329;  Conservative    3;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       1 MLGIMAWNATCKNWLAAEAALEKYYLSIFYGIEFVVGVLGNTIVVYGYIFSLKNWNSSNI 60
           |||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       1 MLGIMAWNATCKNWLAAEAALEKYYLSIFYGIEFVVGVLGNTIVVYGYIFSLKNWNSSNI 60

Qy      61 YLFNLSVSDLAFLCTLPMLIRSYANGNWIYGDVLCISNRYVLHANLYTSILFLTFISIDR 120
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db      61 YLFNLSVSDLAFLCTLPMLIRSYANGNWIYGDVLCISNRYVLHANLYTSILFLTFISIDR 120

Qy     121 YLIIKYPFREHLLQKKEFAILISLAIWVLVTLELLPILPLINPVITDNGTTCNDFASSGD 180
           |||||||||||||||| ||||||:||||||||||||||||||||||||||||||||||||
Db     121 YLIIKYPFREHLLQKKECAILISLAMWVLVTLELLPILPLINPVITDNGTTCNDFASSGD 180

Qy     181 PNYNLIYSMCLTLLGFLIPLFVMCFFYYKIALFLKQRNRQVATALPLEKPLNLVIMAVVI 240
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     181 PNYNLIYSMCLTLLGFLIPLFVMCFFYYKIALFLKQRNRQVATALPLEKPLNLVIMAVVI 240

Qy     241 FSVPFTPYHVMRNVRIASRLGSWKQYQCTQVVINSFYIVTRPLAFLNSVINPVFYFLLGD 300
           ||| |||||||||||||||||||||||||||||||:|||||||||||||||:||
Db     241 FSVXFTPYHVMRNVRIASRLGSWKQYQCTQVVINSFYIVTRPVAFLNSVINPVFYFLVGD 300

Qy     301 HFRDMLMNQLRHNFKSLTSFSRWAHELLLSFREK 334
           |||||||||||||||||||||||||||||||||
Db     301 HFRDMLMNQLRHNFKSLTSFSRWAHELLLSFREK 334


RESULT 7
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```
AAU31029
ID   AAU31029 standard; Protein; 387 AA.
XX
AC   AAU31029;
XX
DT   18-DEC-2001  (first entry)
XX
DE   Novel human secreted protein #1520.
XX
KW   Human; vaccination; gene therapy; nutritional supplement;
KW   stem cell proliferation; haematopoiesis; nerve tissue regeneration;
KW   immune suppression; immune stimulation; anti-inflammatory; leukaemia.
XX
OS   Homo sapiens.
XX
PN   WO200179449-A2.
XX
PD   25-OCT-2001.
XX
PF   16-APR-2001; 2001WO-US08656.
XX
PR   18-APR-2000; 2000US-0552929.
PR   26-JAN-2001; 2001US-0770160.
XX
PA   (HYSE-) HYSEQ INC.
XX
PI   Tang YT,  Liu C,  Drmanac RT;
XX
DR   WPI; 2001-611725/70.
XX
PT   Nucleic acids encoding a range of human polypeptides, useful in genetic
PT   vaccination, testing and therapy -
XX
PS   Claim 20; Page 392; 765pp; English.
XX
CC   The invention relates to novel human secreted polypeptides. The
CC   polypeptides and antibodies to the polypeptides are useful for
CC   determining the presence of or predisposition to a disease associated
CC   with altered levels of polypeptide. The polypeptides are also useful for
CC   identifying agents (agonists and antagonists) that bind to them. Cells
CC   expressing the proteins are useful for identifying a therapeutic agent
CC   for use in treatment of a pathology related to aberrant expression or
CC   physiological interactions of the polypeptide. Vectors comprising
CC   the nucleic acids encoding the polypeptides and cells genetically
CC   engineered to express them are also useful for producing the proteins.
CC   The proteins are useful in genetic vaccination, testing and
CC   therapy, and can be used as nutritional supplements. They may be used to
CC   increase stem cell proliferation; to regulate haematopoiesis; and in
CC   bone, cartilage, tendon  and/or nerve tissue growth or regeneration;
CC   immune suppression and/or stimulation; as anti-inflammatory agents; and
CC   in treatment of leukaemias. AAU29510-AAU33304 represent the amino acid
CC   sequences of novel human secreted proteins of the invention.
XX
SQ   Sequence   387 AA;

  Query Match             97.1%;  Score 1696;  DB 22;  Length 387;
  Best Local Similarity   98.8%;  Pred. No. 1.8e-167;
  Matches  325;  Conservative    1;  Mismatches    3;  Indels    0;  Gaps    0;

Qy       6 AWNATCKNWLAAEAALEKYYLSIFYGIEFVVGVLGNTIVVYGYIFSLKNWNSSNIYLFNL 65
           |||||||:||||||||||||||||||||||||||||||||||||||||||||||||||||
Db      59 AWNATCKHWLAAEAALEKYYLSIFYGIEFVVGVLGNTIVVYGYIFSLKNWNSSNIYLFNL 118

Qy      66 SVSDLAFLCTLPMLIRSYANGNWIYGDVLCISNRYVLHANLYTSILFLTFISIDRYLIIK 125
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     119 SVSDLAFLCTLPMLIRSYANGNWIYGDVLCISNRYVLHANLYTSILFLTFISIDRYLIIK 178

Qy     126 YPFREHLLQKKEFAILISLAIWVLVTLELLPILPLINPVITDNGTTCNDFASSGDPNYNL 185
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     179 YPFREHLLQKKEFAILISLAIWVLVTLELLPILPLINPVITDNGTTCNDFASSGDPNYNL 238

Qy     186 IYSMCLTLLGFLIPLFVMCFFYYKIALFLKQRNRQVATALPLEKPLNLVIMAVVIFSVPF 245
           |||||||||||| ||||||| |||||||||||||||||||||||||||||||||||| |

Db     239 IYSMCLTLLGFSIPLFVMCLFYYKIALFLKQRNRQVATALPLEKPLNLVIMAVVIFSVLF 298

Qy     246 TPYHVMRNVRIASRLGSWKQYQCTQVVINSFYIVTRPLAFLNSVINPVFYFLLGDHFRDM 305
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     299 TPYHVMRNVRIASRLGSWKQYQCTQVVINSFYIVTRPLAFLNSVINPVFYFLLGDHFRDM 358

Qy     306 LMNQLRHNFKSLTSFSRWAHELLLSFREK 334
           |||||||||||||||||||||||||||||
Db     359 LMNQLRHNFKSLTSFSRWAHELLLSFREK 387


RESULT 8
AAB45376
ID   AAB45376 standard; Protein; 258 AA.
XX
AC   AAB45376;
XX
DT   14-FEB-2001  (first entry)
XX
DE   Human secreted protein sequence encoded by gene 37 SEQ ID NO:128.
XX
KW   Human; secreted protein; diagnosis; immunosuppressive; antiarthritic;
KW   antirheumatic; antiproliferative; cytostatic; cardiant; vasotropic;
KW   cerebroprotective; nootropic; neuroprotective; antibacterial; virucide;
KW   fungicide; ophthalmological; vulnerary; gene therapy; autoimmune disease;
KW   hyperproliferative disorder; cardiovascular disorder; angiogenesis;
KW   cerebrovascular disorder; nervous system disorder; infection; skin aging;
KW   ocular disorder; wound healing; food additive; preservative.
XX
OS   Homo sapiens.
XX
PN   WO200061628-A1.
XX
PD   19-OCT-2000.
XX
PF   06-APR-2000; 2000WO-US09070.
XX
PR   09-APR-1999;   99US-0128695.
PR   14-JAN-2000; 2000US-0176052.
XX
PA   (HUMA-) HUMAN GENOME SCI INC.
XX
PI   Rosen CA,  Ruben SM,  Komatsoulis G;
XX
DR   WPI; 2000-619228/59.
XX
PT   New nucleic acid molecules encoding 49 human secreted proteins for
PT   diagnosing, preventing, treating or ameliorating medical conditions and
PT   used as food additives or preservatives -
XX
PS   Disclosure; Page 447-448; 454pp; English.
XX
CC   The polynucleotide sequences given in AAC81086 to AAC81134 encode the
CC   human secreted proteins given in AAB45308 to AAB45356. AAB45357 to
CC   AAB45384 represent human secreted polypeptide sequences and proteins
CC   homologous to them, which are given in the exemplification of the present
CC   invention. Human secreted proteins have activities based on the tissues
CC   and cells the genes are expressed in. Examples of activities include:
CC   antiarthritic; immunosuppressive; antirheumatic; antiproliferative;
CC   cytostatic; cardiant; vasotropic; cerebroprotective; nootropic;
CC   neuroprotective; antibacterial; virucide; fungicide; ophthalmological;
CC   and vulnerary. The polynucleotides and polypeptides can be used to
CC   prevent, treat or ameliorate a medical condition in e.g. humans, mice,
CC   rabbits, goats, horses, cats, dogs, chickens or sheep. They are also used
CC   in diagnosing a pathological condition or susceptibility to a
CC   pathological condition. Disorders which are diagnosed or treated include
CC   autoimmune diseases, hyperproliferative disorders, cardiovascular
CC   disorders, cerebrovascular disorders, angiogenesis, nervous system
CC   disorders, infections caused by bacteria, viruses and fungi and ocular
CC   disorders. The polypeptides can also be used to aid wound healing and
CC   epithelial cell proliferation, to prevent skin aging due to sunburn, to
CC   maintain organs before transplantation, for supporting cell culture of
CC   primary tissues, to regenerate tissues and in chemotaxis. The
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CC   polypeptides can also be used as a food additive or preservative to
CC   increase or decrease storage capabilities, fat content, lipid, protein,
CC   carbohydrate, vitamins, minerals, cofactors and other nutritional
CC   components. AAC81077 to AAC81085 and AAB45307 represent sequences used in
CC   the exemplification of the present invention.
XX
SQ   Sequence   258 AA;

  Query Match             76.3%;  Score 1333;  DB 21;  Length 258;
  Best Local Similarity   99.6%;  Pred. No. 5.2e-130;
  Matches  257;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy      24 YYLSIFYGIEFVVGVLGNTIVVYGYIFSLKNWNSSNIYLFNLSVSDLAFLCTLPMLIRSY 83
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       1 YYLSIFYGIEFVVGVLGNTIVVYGYIFSLKNWNSSNIYLFNLSVSDLAFLCTLPMLIRSY 60

Qy      84 ANGNWIYGDVLCISNRYVLHANLYTSILFLTFISIDRYLIIKYPFREHLLQKKEFAILIS 143
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db      61 ANGNWIYGDVLCISNRYVLHANLYTSILFLTFISIDRYLIIKYPFREHLLQKKEFAILIS 120

Qy     144 LAIWVLVTLELLPILPLINPVITDNGTTCNDFASSGDPNYNLIYSMCLTLLGFLIPLFVM 203
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     121 LAIWVLVTLELLPILPLINPVITDNGTTCNDFASSGDPNYNLIYSMCLTLLGFLIPLFVM 180

Qy     204 CFFYYKIALFLKQRNRQVATALPLEKPLNLVIMAVVIFSVPFTPYHVMRNVRIASRLGSW 263
           ||||||||||||||||||||||||||||||||||| ||||||||||||||||||||||||
Db     181 CFFYYKIALFLKQRNRQVATALPLEKPLNLVIMAVVIFSVLFTPYHVMRNVRIASRLGSW 240

Qy     264 KQYQCTQVVINSFYIVTR 281
           ||||||||||||||||||
Db     241 KQYQCTQVVINSFYIVTR 258


RESULT 9
AAU74904
ID   AAU74904 standard; Protein; 317 AA.
XX
AC   AAU74904;
XX
DT   09-APR-2002  (first entry)
XX
DE   Amino acid sequence of mouse G-protein coupled receptor TGR18 protein.
XX
KW   Mouse; G-protein coupled; receptor; GPCR; TGR18; kidney disease;
KW   signal transduction modulator; cerebral cavernous malformation;
KW   hyperlipidemia; obesity; dyslexia; cardiac myxoma; renal failure;
KW   nephritis; hypertension; liver disease; cirrhosis; blood disorder;
KW   spleen-associated disorder; immune disorder.
XX
OS   Mus sp.
XX
PN   WO200200719-A2.
XX
PD   03-JAN-2002.
XX
PF   25-JUN-2001; 2001WO-US20363.
XX
PR   23-JUN-2000; 2000US-213461P.
XX
PA   (TULA-) TULARIK INC.
XX
PI   Lin DC,  Zhao J,  Chen J,  Cutler G;
XX
DR   WPI; 2002-147880/19.
DR   N-PSDB; ABK12957.
XX
PT   New G-protein coupled receptor polypeptides, useful for identifying
PT   modulators of signal transduction for treating kidney disease,
PT   hyperlipidemia, obesity, dyslexia and cardiac myxoma  -
XX
PS   Claim 33; Page 59; 78pp; English.
XX
CC   The present invention relates to a new G-protein coupled receptor (GPCR)
CC   polypeptide comprising greater than 70% amino acid sequence identity to
CC   the amino acid sequence of human GPCRs TGR62, TGR21, TGR130.1, TGR130.2,
CC   human TGR213 or TGR92, 80% amino acid sequence identity to mouse TGR18
CC   or 90% amino acid sequence identity to human novel edg receptor protein,
CC   as defined in the specification. The GPCR covalently linked to a solid
CC   phase is useful for identifying a compound that modulates signal
CC   transduction. The identified compounds are useful for treating
CC   kidney disease, cerebral cavernous malformations, hyperlipidemia,
CC   obesity, dyslexia and cardiac myxoma. The molecules of the invention are
CC   useful for diagnosing disorders or conditions such as kidney-related
CC   conditions or diseases such as renal failure, nephritis, nephrotic
CC   syndrome, asymptomatic urinary abnormalities, renal tubule defects,
CC   hypertension and nephrolithiasis, liver-related disease or condition
CC   e.g. cirrhosis, infiltrations, lesions, functional disorders and jaundice
CC   and spleen-associated disorders or conditions e.g. splenic enlargement,
CC   immune disorders, blood disorders and others. Modulation of the
CC   polypeptide of the invention is useful to treat or prevent any of the
CC   above conditions or diseases. The present amino acid sequence represents
CC   the mouse GPCR TGR18 protein of the invention. This sequence is one of
CC   seven novel G protein coupled receptors of the invention (AAU74904-
CC   AAU74911).
XX
SQ   Sequence   317 AA;

  Query Match             70.5%;  Score 1231.5;  DB 23;  Length 317;
  Best Local Similarity   71.8%;  Pred. No. 2.4e-119;
  Matches  227;  Conservative   42;  Mismatches   46;  Indels    1;  Gaps    1;

Qy       5 MAWNATCKNWLAAEAALEKYYLSIFYGIEFVVGVLGNTIVVYGYIFSLKNWNSSNIYLFN 64
           || | :|:|||| || | ||||| || ||| |:||| ||:||:| :|||||||:||||
Db       1 MAQNLSCENWLATEAILNKYYLSAFYAIEFIFGLLGNVTVVFGYLFCMKNWNSSNVYLFN 60

Qy      65 LSVSDLAFLCTLPMLIRSYANGNWIYGDVLCISNRYVLHANLYTSILFLTFISIDRYLII 124
           ||:|| |||||||:||:||||    |||||||||||||| ||||||||||||:||||::
Db      61 LSISDFAFLCTLPILIKSYANDKGTYGDVLCISNRYVLHTNLYTSILFLTFISMDRYLLM 120

Qy     125 KYPFREHLLQKKEFAILISLAIWVLVTLELLPILPLINPVITDNGTTCNDFASSGDPNYN 184
           ||||||| |||||||||||||:| |||||:||:|  || |  : |: | |:||||:| :|
Db     121 KYPFREHFLQKKEFAILISLAVWALVTLEVLPMLTFINSVPKEEGSNCIDYASSGNPEHN 180

Qy     185 LIYSMCLTLLGFLIPLFVMCFFYYKIALFLKQRNRQVATALPLEKPLNLVIMAVVIFSVP 244
           ||||:|||||||||| |||||||: :|||:|::| ||||||:||  ||::|||||:
Db     181 LIYSLCLTLLGFLIPLSVMCFFYYKMVVFLKRRSQQQATALPLDKPQRLVVLAVVIFSIL 240

Qy     245 FTPYHVMRNVRIASRLGSWKQYQCTQVVINSFYIVTRPLAFLNSVINPVFYFLLGDHFRD 304
           |||||:|||:|||||| || |  |||  | | | :||||||||| |||:||||:|||:|:
Db     241 FTPYHIMRNLRIASRLDSWPQ-GCTQKAIKSIYTLTRPLAFLNSAINPIFYFLMGDHYRE 299

Qy     305 MLMNQLRHNFKSLTSF 320
           ||::: |  |||||||
Db     300 MLISKFRQYFKSLTSF 315


RESULT 10
AAU10984
ID   AAU10984 standard; Protein; 373 AA.
XX
AC   AAU10984;
XX
DT   12-MAR-2002  (first entry)
XX
DE   Purinergic receptor P2Y, G-protein coupled 1, isoform #1.
XX
KW   Purinergic receptor P2Y, G-protein coupled 1; P2RY1; anticoagulant;
KW   coagulant; platelet aggregation; haplotyping; drug screening;
KW   transgenic animal; human.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   Misc-difference 34
FT                   /note= "Wild type Ala substituted by Val"
XX
```

PN WO200190117-A2.
XX
PD 29-NOV-2001.
XX
PF 21-MAY-2001; 2001WO-US16432.
XX
PR 19-MAY-2000; 2000US-205996P.
XX
PA (GENA-) GENAISSANCE PHARM INC.
XX
PI Kazemi A, Koshy B, Tanguay DA;
XX
DR WPI; 2002-083074/11.
XX
PT New purinergic receptor P2Y G-protein coupled 1 (P2RY1) gene
PT polymorphic variants, useful e.g. in studying the expression and
PT function of P2RY1 and screening candidate drugs for treating diseases
PT related to P2RY1 activity -
XX
PS Disclosure; Page -; 79pp; English.
XX
CC The invention relates to a novel isolated polypeptide comprising a
CC sequence which is a polymorphic variant of a reference sequence for the
CC purinergic receptor P2Y, G-protein coupled, 1 (P2RY1) protein or its
CC fragment. The polymorphic variant comprises one or more variant amino
CC acids selected from valine at a position 34 and glycine at a position
CC 262. The polymorphic variants are useful in studying the expression
CC and function of P2RY1, in expressing P2RY1 protein for use in screening
CC for candidate drugs to treat diseases related to P2RY1 activity, in
CC studying the effect of the variation on the biological activity of
CC P2RY1, and the binding affinity of candidate drugs targeting P2RY1 for
CC the treatment of disorders related to platelet aggregation. The
CC haplotyping methods are useful in validating P2RY1 as a candidate
CC target for treating a specific condition or disease predicted to be
CC associated with P2RY1 activity, or in the design of clinical trials of
CC candidate drugs for treating a specific condition or disease associated
CC with P2RY1 activity. The transgenic animals are useful for studying
CC expression of the P2RY1 isogenes in vivo, for in vivo screening and
CC testing of drugs targeted against P2RY1 protein, and for testing the
CC efficacy of therapeutic agents and compounds for disorders related to
CC platelet aggregation in a biological system. The present sequence
CC represents the amino acid sequence of human purinergic receptor P2Y,
CC G-coupled protein 1 (P2RY1), isoform #1.
CC Note: This sequence is not shown in the specification but is
CC derived from the human wild type P2RY1 sequence given in Figure 3 (see
CC AAU10983).
XX
SQ Sequence 373 AA;

Query Match 28.6%; Score 499.5; DB 23; Length 373;
Best Local Similarity 36.3%; Pred. No. 3.1e-43;
Matches 117; Conservative 61; Mismatches 123; Indels 21; Gaps 9;

```
Qy       6 AW-NATCKNWLAA----EAALEK-----YYLSIFYGIEFVVGVLGNTIVVYGYIFSLKNW 55
           :| |:|  : :|     : || |      |||   | : |::| |||:: :: ::| :| |
Db      24 SWGNSTVASTVAVSSSFKCALTKTGFQFYYLPAVYILVFIIGFLGNSVAIWMFVFHMKPW 83

Qy      56 NSSNIYLFNLSVSDLAFLCTLPMLIRSYAN-GNWIYGDVLCISNRYVLHANLYTSILFLT 114
           :  ::|:|||:::|  :: ||| ||  | |  :||:|| :|   |:: | ||| ||||||
Db      84 SGISVYMFNLALADFLYVLTLPALIFYYFNKTDWIFGDAMCKLQRFIFHVNLYGSILFLT 143

Qy     115 FISIDRYLIIKYPFREHLLQKKEFAILISLAIWVLVTLELLPILPLINPVITDNGT-TCN 173
             ||  ||  : || :     ||: || ||: :|::| : : |||      :  | | ||
Db     144 CISAHRYSGVVYPLKSLGRLKKKNAICISVLVWLIVVVAISPILFYSGTGVRKNKTITCY 203

Qy     174 DFASSGDPNYNLIYSMCLTLLGFLIPLFVM--CFFYYKIALFLKQRNRQVATALPL-EKP 230
           | |         ||||| |:  | :|| ::  |:     ||  | :      ||  |
Db     204 DTTSDEYLRSYFIYSMCTTVAMFCVPLVLILGCYGLIVRALIYKDLDNS-----PLRRKS 258

Qy     231 LNLVIMAVVIFSVPFTPYHVMRNVRIASRLGSWKQYQCT-QVVINSFYIVTRPLAFLNSV 289
           : |||: : :|:| : |:|||: : : :||       |     : : | ||| || |||
Db     259 IYLVIIVLTVFAVSYIPFHVMKTMNLRARLDFQTPAMCAFNDRVYATYQVTRGLASLNSC 318
```

Qy 290 INPVFYFLLGDHFRDMLMNQLR 311
::|: ||| || || | |
Db 319 VDPILYFLAGDTFRRRLSRATR 340

RESULT 11
AAE04389
ID AAE04389 standard; Protein; 373 AA.
XX
AC AAE04389;
XX
DT 04-SEP-2001 (first entry)
XX
DE Human P2-purinergic receptor subtype, P2Y1.
XX
KW Human; P2-purinergic receptor; P2Y1; cardiant; vasotropic; thrombolytic;
KW cerebroprotective; gynaecological; ADP; adenosine 5'-diphosphate; angina;
KW myocardial infarction; ischaemic attack; preeclampsia; bleeding disorder;
KW carotid endarterectomy; vascular graft surgery; brain disorder; migraine;
KW vascular injury; schizophrenia; eating disorder; depression; angioplasty;
KW peripheral vascular disease; platelet aggregation; restenotic; embolism;
KW thrombocytopaenic purpura; stroke; pertussis toxin-sensitive G protein;
KW Gi; disseminated intravascular coagulation; thrombosis.
XX
OS Homo sapiens.
XX

FH	Key	Location/Qualifiers
FT	Domain	53..76
FT		/label= Transmembrane_domain_1
FT	Domain	84..109
FT		/label= Transmembrane_domain_2
FT	Domain	124..148
FT		/label= Transmembrane_domain_3
FT	Domain	167..190
FT		/label= Transmembrane_domain_4
FT	Domain	217..241
FT		/label= Transmembrane_domain_5
FT	Domain	258..283
FT		/label= Transmembrane_domain_6
FT	Domain	304..329
FT		/label= Transmembrane_domain_7

XX
PN WO200146454-A1.
XX
PD 28-JUN-2001.
XX
PF 26-DEC-2000; 2000WO-US34998.
XX
PR 23-DEC-1999; 99US-0171622.
XX
PA (CORT-) COR THERAPEUTICS INC.
XX
PI Conley PB, Jantzen H, Ramakrishnan-Dubridge V, Julius DJ;
PI Hollopeter G;
XX
DR WPI; 2001-418082/44.
XX
PT Novel isolated ADP receptor, termed P2Y12 receptor polypeptide, useful
PT for identifying binding partners and for diagnostic applications -
XX
PS Disclosure; Fig 5A; 108pp; English.
XX
CC The invention relates to ADP (adenosine 5'-diphosphate) receptor, termed
CC as P2Y12 receptor and its corresponding cDNA molecule. P2Y12 receptor is
CC the subtype of P2-purinergic receptor. The P2Y12 receptor is expressed
CC selectively in the platelets and brain, and couples to a pertussis toxin-
CC sensitive G protein (Gi). P2Y12 receptor is a G protein-coupled receptor
CC that responds to ADP. The invention also relates to a method for
CC identifying an agent which is useful for modulating acute myocardial
CC infarction, unstable angina, chronic stable angina, transient ischaemic
CC attacks, strokes, peripheral vascular disease, preeclampsia, deep venous
CC thrombosis, embolism, disseminated intravascular coagulation, thrombotic
CC thrombocytopaenic purpura or a bleeding disorder; thrombotic and

```
CC   restenotic complications following angioplasty, carotid endarterectomy,
CC   post CABG (coronary artery bypass graft) surgery, vascular graft surgery,
CC   stent placements or insertion of endovascular devices and prostheses.
CC   P2Y12 receptor is useful for identifying binding partners and for
CC   diagnostic applications. P2Y12 receptor provides targets for screening
CC   synthetic small molecules and combinatorial or naturally occurring
CC   compound libraries to regulate platelet aggregation, vascular injury, or
CC   disease as well as schizophrenia, eating disorders, depression, migraine
CC   and other brain disorders. The present sequence is human P2-purinergic
CC   receptor subtype, P2Y1 related to the invention.
XX
SQ   Sequence   373 AA;

  Query Match             28.5%;  Score 497.5;  DB 22;  Length 373;
  Best Local Similarity   36.3%;  Pred. No. 5e-43;
  Matches  117;  Conservative   60;  Mismatches  124;  Indels   21;  Gaps    9;

Qy       6 AW-NATCKNWLAA----EAALEK-----YYLSIFYGIEFVVGVLGNTIVVYGYIFSLKNW 55
           :| |:|  :  |     : || |      |||   | : |::| |||:: :: ::| :| |
Db      24 SWGNSTVASTAAVSSSFKCALTKTGFQFYYLPAVYILVFIIGFLGNSVAIWMFVFHMKPW 83

Qy      56 NSSNIYLFNLSVSDLAFLCTLPMLIRSYAN-GNWIYGDVLCISNRYVLHANLYTSILFLT 114
           :  ::|:|||:::|  :: ||| ||  | |  :||:|| :|   |:: | ||| ||||||
Db      84 SGISVYMFNLALADFLYVLTLPALIFYYFNKTDWIFGDAMCKLQRFIFHVNLYGSILFLT 143

Qy     115 FISIDRYLIIKYPFREHLLQKKEFAILISLAIWVLVTLELLPILPLINPVITDNGT-TCN 173
            ||  ||  : || :     ||: || ||: :|::| : : |||      :  | | ||
Db     144 CISAHRYSGVVYPLKSLGRLKKKNAICISVLVWLIVVVAISPILFYSGTGVRKNKTITCY 203

Qy     174 DFASSGDPNYNLIYSMCLTLLGFLIPLFVM--CFFYYKIALFLKQRNRQVATALPL-EKP 230
           |  |        ||||| |:  | :|| ::  |:     ||  |  :        ||  |
Db     204 DTTSDEYLRSYFIYSMCTTVAMFCVPLVLILGCYGLIVRALIYKDLDNS-----PLRRKS 258

Qy     231 LNLVIMAVVIFSVPFTPYHVMRNVRIASRLGSWKQYQCT-QVVINSFYIVTRPLAFLNSV 289
           : |||: : :|:| : |:|||: : : :||       |     : : | ||| || |||
Db     259 IYLVIIVLTVFAVSYIPFHVMKTMNLRARLDFQTPAMCAFNDRVYATYQVTRGLASLNSC 318

Qy     290 INPVFYFLLGDHFRDMLMNQLR 311
           ::|: ||| || ||  |    |
Db     319 VDPILYFLAGDTFRRRLSRATR 340


RESULT 12
AAU10983
ID   AAU10983 standard; Protein; 373 AA.
XX
AC   AAU10983;
XX
DT   12-MAR-2002  (first entry)
XX
DE   Purinergic receptor P2Y, G-protein coupled 1.
XX
KW   Purinergic receptor P2Y, G-protein coupled 1; P2RY1; anticoagulant;
KW   coagulant; platelet aggregation; haplotyping; drug screening;
KW   transgenic animal; human.
XX
OS   Homo sapiens.
XX
PN   WO200190117-A2.
XX
PD   29-NOV-2001.
XX
PF   21-MAY-2001; 2001WO-US16432.
XX
PR   19-MAY-2000; 2000US-205996P.
XX
PA   (GENA-) GENAISSANCE PHARM INC.
XX
PI   Kazemi A,  Koshy B,  Tanguay DA;
XX
DR   WPI; 2002-083074/11.
DR   N-PSDB; AAS18599.
XX
PT   New purinergic receptor P2Y G-protein coupled 1 (P2RY1) gene
PT   polymorphic variants, useful e.g. in studying the expression and
PT   function of P2RY1 and screening candidate drugs for treating diseases
PT   related to P2RY1 activity  -
XX
PS   Claim 28; Fig 3; 79pp; English.
XX
CC   The invention relates to a novel isolated polypeptide comprising a
CC   sequence which is a polymorphic variant of a reference sequence for the
CC   purinergic receptor P2Y, G-protein coupled, 1 (P2RY1) protein or its
CC   fragment. The polymorphic variant comprises one or more variant amino
CC   acids selected from valine at a position 34 and glycine at a position
CC   262. The polymorphic variants are useful in studying the expression
CC   and function of P2RY1, in expressing P2RY1 protein for use in screening
CC   for candidate drugs to treat diseases related to P2RY1 activity, in
CC   studying the effect of the variation on the biological activity of
CC   P2RY1, and the binding affinity of candidate drugs targeting P2RY1 for
CC   the treatment of disorders related to platelet aggregation. The
CC   haplotyping methods are useful in validating P2RY1 as a candidate
CC   target for treating a specific condition or disease predicted to be
CC   associated with P2RY1 activity, or in the design of clinical trials of
CC   candidate drugs for treating a specific condition or disease associated
CC   with P2RY1 activity. The transgenic animals are useful for studying
CC   expression of the P2RY1 isogenes in vivo, for in vivo screening and
CC   testing of drugs targeted against P2RY1 protein, and for testing the
CC   efficacy of therapeutic agents and compounds for disorders related to
CC   platelet aggregation in a biological system. The present sequence
CC   represents the amino acid sequence of human purinergic receptor P2Y,
CC   G-coupled protein 1 (P2RY1).
XX
SQ   Sequence   373 AA;

  Query Match             28.5%;  Score 497.5;  DB 23;  Length 373;
  Best Local Similarity   36.3%;  Pred. No. 5e-43;
  Matches  117;  Conservative   60;  Mismatches  124;  Indels   21;  Gaps    9;

Qy       6 AW-NATCKNWLAA----EAALEK-----YYLSIFYGIEFVVGVLGNTIVVYGYIFSLKNW 55
           :| |:|  :  |     : || |      |||   | : |::| |||:: :: ::| :| |
Db      24 SWGNSTVASTAAVSSSFKCALTKTGFQFYYLPAVYILVFIIGFLGNSVAIWMFVFHMKPW 83

Qy      56 NSSNIYLFNLSVSDLAFLCTLPMLIRSYAN-GNWIYGDVLCISNRYVLHANLYTSILFLT 114
           :  ::|:|||:::|  :: ||| ||  | |  :||:|| :|.  |:: | ||| ||||||
Db      84 SGISVYMFNLALADFLYVLTLPALIFYYFNKTDWIFGDAMCKLQRFIFHVNLYGSILFLT 143

Qy     115 FISIDRYLIIKYPFREHLLQKKEFAILISLAIWVLVTLELLPILPLINPVITDNGT-TCN 173
            ||  ||  : || :     ||: || ||: :|::| : : |||      :  | | ||
Db     144 CISAHRYSGVVYPLKSLGRLKKKNAICISVLVWLIVVVAISPILFYSGTGVRKNKTITCY 203

Qy     174 DFASSGDPNYNLIYSMCLTLLGFLIPLFVM--CFFYYKIALFLKQRNRQVATALPL-EKP 230
           |  |        ||||| |:  | :|| ::  |:     ||  |  :        ||  |
Db     204 DTTSDEYLRSYFIYSMCTTVAMFCVPLVLILGCYGLIVRALIYKDLDNS-----PLRRKS 258

Qy     231 LNLVIMAVVIFSVPFTPYHVMRNVRIASRLGSWKQYQCT-QVVINSFYIVTRPLAFLNSV 289
           : |||: : :|:| : |:|||: : : :||       |     : : | ||| || |||
Db     259 IYLVIIVLTVFAVSYIPFHVMKTMNLRARLDFQTPAMCAFNDRVYATYQVTRGLASLNSC 318

Qy     290 INPVFYFLLGDHFRDMLMNQLR 311
           ::|: ||| || ||  |    |
Db     319 VDPILYFLAGDTFRRRLSRATR 340


RESULT 13
AAU10985
ID   AAU10985 standard; Protein; 373 AA.
XX
AC   AAU10985;
XX
DT   12-MAR-2002  (first entry)
XX
DE   Purinergic receptor P2Y, G-protein coupled 1, isoform #2.
XX
KW   Purinergic receptor P2Y, G-protein coupled 1; P2RY1; anticoagulant;
KW   coagulant; platelet aggregation; haplotyping; drug screening;
```

```
KW   transgenic animal; human.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   Misc-difference 262
FT                   /note= "Wild type Val substituted by Gly"
XX
PN   WO200190117-A2.
XX
PD   29-NOV-2001.
XX
PF   21-MAY-2001; 2001WO-US16432.
XX
PR   19-MAY-2000; 2000US-205996P.
XX
PA   (GENA-) GENAISSANCE PHARM INC.
XX
PI   Kazemi A,  Koshy B,  Tanguay DA;
XX
DR   WPI; 2002-083074/11.
XX
PT   New purinergic receptor P2Y G-protein coupled 1 (P2RY1) gene
PT   polymorphic variants, useful e.g. in studying the expression and
PT   function of P2RY1 and screening candidate drugs for treating diseases
PT   related to P2RY1 activity -
XX
PS   Disclosure; Page -; 79pp; English.
XX
CC   The invention relates to a novel isolated polypeptide comprising a
CC   sequence which is a polymorphic variant of a reference sequence for the
CC   purinergic receptor P2Y, G-protein coupled, 1 (P2RY1) protein or its
CC   fragment. The polymorphic variant comprises one or more variant amino
CC   acids selected from valine at a position 34 and glycine at a position
CC   262. The polymorphic variants are useful in studying the expression
CC   and function of P2RY1, in expressing P2RY1 protein for use in screening
CC   for candidate drugs to treat diseases related to P2RY1 activity, in
CC   studying the effect of the variation on the biological activity of
CC   P2RY1, and the binding affinity of candidate drugs targeting P2RY1 for
CC   the treatment of disorders related to platelet aggregation. The
CC   haplotyping methods are useful in validating P2RY1 as a candidate
CC   target for treating a specific condition or disease predicted to be
CC   associated with P2RY1 activity, or in the design of clinical trials of
CC   candidate drugs for treating a specific condition or disease associated
CC   with P2RY1 activity. The transgenic animals are useful for studying
CC   expression of the P2RY1 isogenes in vivo, for in vivo screening and
CC   testing of drugs targeted against P2RY1 protein, and for testing the
CC   efficacy of therapeutic agents and compounds for disorders related to
CC   platelet aggregation in a biological system. The present sequence
CC   represents the amino acid sequence of human purinergic receptor P2Y,
CC   G-coupled protein 1 (P2RY1), isoform #2.
CC   Note: This sequence is not shown in the specification but is
CC   derived from the human wild type P2RY1 sequence given in Figure 3 (see
CC   AAU10983).
XX
SQ   Sequence   373 AA;

  Query Match             28.1%;  Score 490.5;  DB 23;  Length 373;
  Best Local Similarity   36.0%;  Pred. No. 2.7e-42;
  Matches  116;  Conservative   60;  Mismatches  125;  Indels   21;  Gaps    9;

Qy       6 AW-NATCKNWLAA----EAALEK-----YYLSIFYGIEFVVGVLGNTIVVYGYIFSLKNW 55
           :| |:|  :  |     : || |     |||   | : |::| |||:: :: ::| :| |
Db      24 SWGNSTVASTAAVSSSFKCALTKTGFQFYYLPAVYILVFIIGFLGNSVAIWMFVFHMKPW 83

Qy      56 NSSNIYLFNLSVSDLAFLCTLPMLIRSYAN-GNWIYGDVLCISNRYVLHANLYTSILFLT 114
           :  ::|:|||:::|  :: ||| ||  | |  :||:|| :|   |:: | ||| ||||||
Db      84 SGISVYMFNLALADFLYVLTLPALIFYYFNKTDWIFGDAMCKLQRFIFHVNLYGSILFLT 143

Qy     115 FISIDRYLIIKYPFREHLLQKKEFAILISLAIWVLVTLELLPILPLINPVITDNGT-TCN 173
             ||  ||  : || :     ||: || ||: :|::| : : |||      :  | | ||
Db     144 CISAHRYSGVVYPLKSLGRLKKKNAICISVLVWLIVVVAISPILFYSGTGVRKNKTITCY 203

Qy     174 DFASSGDPNYNLIYSMCLTLLGFLIPLFVM--CFFYYKIALFLKQRNRQVATALPL-EKP 230
           | |         |||| |:  | :|| ::  |:      ||  |  :          ||  |
Db     204 DTTSDEYLRSYFIYSMCTTVAMFCVPLVLILGCYGLIVRALIYKDLDNS-----PLRRKS 258

Qy     231 LNLVIMAVVIFSVPFTPYHVMRNVRIASRLGSWKQYQCT-QVVINSFYIVTRPLAFLNSV 289
           : | |: : :|:| : |:|||: : : :||       |     : : | ||| || |||
Db     259 IYLGIIVLTVFAVSYIPFHVMKTMNLRARLDFQTPAMCAFNDRVYATYQVTRGLASLNSC 318

Qy     290 INPVFYFLLGDHFRDMLMNQLR 311
           ::|: ||| || ||  |    |
Db     319 VDPILYFLAGDTFRRRLSRATR 340


RESULT 14
AAU04375
ID   AAU04375 standard; Protein; 337 AA.
XX
AC   AAU04375;
XX
DT   23-OCT-2001  (first entry)
XX
DE   Human G-protein coupled receptor, hRUP21.
XX
KW   Human; G-protein coupled receptor; GPCR; hRUP21; agonist;
KW   inverse agonist; lung cancer.
XX
OS   Homo sapiens.
XX
PN   WO200136471-A2.
XX
PD   25-MAY-2001.
XX
PF   16-NOV-2000; 2000WO-US31509.
XX
PR   17-NOV-1999;   99US-0166088.
PR   17-NOV-1999;   99US-0166099.
PR   17-NOV-1999;   99US-0166369.
PR   23-DEC-1999;   99US-0171900.
PR   23-DEC-1999;   99US-0171901.
PR   23-DEC-1999;   99US-0171902.
PR   11-FEB-2000; 2000US-0181749.
PR   14-MAR-2000; 2000US-0189258.
PR   14-MAR-2000; 2000US-0189259.
PR   10-APR-2000; 2000US-0195898.
PR   10-APR-2000; 2000US-0195899.
PR   10-APR-2000; 2000US-0196078.
PR   28-APR-2000; 2000US-0200419.
PR   12-MAY-2000; 2000US-0203630.
PR   12-JUN-2000; 2000US-0210741.
PR   12-JUN-2000; 2000US-0210982.
PR   21-AUG-2000; 2000US-0226760.
PR   26-SEP-2000; 2000US-0235418.
PR   26-SEP-2000; 2000US-0235779.
PR   20-OCT-2000; 2000US-0242332.
PR   20-OCT-2000; 2000US-0242343.
XX
PA   (AREN-) ARENA PHARM INC.
XX
PI   Chen R,  Dang HT,  Lowitz KP;
XX
DR   WPI; 2001-355616/37.
DR   N-PSDB; AAS07948.
XX
PT   Endogenous and non-endogenous versions of human G-protein coupled
PT   receptors for direct identification of candidate compounds as agonists,
PT   inverse agonists or partial agonists for use as therapeutic agents -
XX
PS   Claim 53; Page 114-115; 160pp; English.
XX
CC   The sequence represents a human G-protein coupled receptor (GPCR),
CC   hRUP21. The endogenous and non-endogenous, constitutively activated
CC   versions of human G-protein coupled receptors (GPCR), are useful for
CC   direct identification of candidate compounds as receptor agonists,
```

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CC   inverse agonists or partial agonists having applicability as therapeutic
CC   agents for treating diseases related to GPCR, e.g. lung cancer.
CC   Non-endogenous version of human GPCRs are also utilized in research
CC   settings and in vitro and in vivo system, incorporating GPCRs can be
CC   utilised to elucidate and understand the roles these receptors
CC   play in the human condition, both normal and diseased.
XX
SQ   Sequence   337 AA;

  Query Match             27.3%;  Score 477;  DB 22;  Length 337;
  Best Local Similarity   35.9%;  Pred. No. 5.9e-41;
  Matches  110;  Conservative   61;  Mismatches  123;  Indels   12;  Gaps    6;

Qy       8 NATCKNWLAAEAALEKYYLSIFYGIEFVVGVLGNTIVVYGYIFSLKNWNSSNIYLFNLSV 67
Db      23 NCTDEN-----IPLKMHYLPVIYGIIFLVGFPGNAVVISTYIFKMRPWKSSTIIMLNLAC 77

Qy      68 SDLAFLCTLPMLIRSYANG-NWIYGDVLCISNRYVLHANLYTSILFLTFISIDRYLIIKY 126
Db      78 TDLLYLTSLPFLIHYYASGENWIFGDFMCKFIRFSFHFNLYSSILFLTCFSIFRYCVIIH 137

Qy     127 PFREHLLQKKEFAILISLAIWVLVTLELLPILPLINPVITDNGTTCNDFASSGDPNYNLI 186
Db     138 PMSCFSIHKTRCAVVACAVVWIISLVAVIPMTFLITSTNRTNRSACLDLTSSDELNTIKW 197

Qy     187 YSMCLTLLGFLIPLFVMCFFYYKIALFLKQRNRQVATALPLEKPLNLVIMAVVIFSVPFT 246
Db     198 YNLILTATTFCLPLVIVTLCYTTI-IHTLTHGLQTDSCLK-QKARRLTILLLLAFYVCFL 255

Qy     247 PYHVMRNVRIASRLGSWKQYQCT-QVVINSFYIVTRPLAFLNSVINPVFYFLLGDHFRDM 305
Db     256 PFHILRVIRIESRLLS---ISCSIENQIHEAYIVSRPLAALNTFGNLLLYVVVSDNFQQA 312

Qy     306 LMNQLR 311
Db     313 VCSTVR 318


RESULT 15
AAO15399
ID   AAO15399 standard; protein; 337 AA.
XX
AC   AAO15399;
XX
DT   27-SEP-2002  (first entry)
XX
DE   Human G protein-coupled receptor.
XX
KW   Human; gene therapy; G protein-coupled receptor; drug development;
KW   central nervous system disease; endocrine disease; metabolic disease;
KW   cancer; respiratory disease; digestive disease; immune disease;
KW   inflammation; infection; circulatory disease.
XX
OS   Homo sapiens.
XX
PN   WO200257441-A1.
XX
PD   25-JUL-2002.
XX
PF   17-JAN-2002; 2002WO-JP00270.
XX
PR   18-JAN-2001; 2001JP-0010714.
PR   30-MAR-2001; 2001JP-0102484.
XX
PA   (TAKE ) TAKEDA CHEM IND LTD.
XX
PI   Miwa M,  Ito T,  Shintani Y,  Miyajima N;
XX
DR   WPI; 2002-566800/60.
DR   N-PSDB; AAL43942.
XX
PT   Human kidney-originated G protein-coupled receptor protein TGR30 and
PT   encoded DNA, for developing drugs to treat central nervous diseases,
PT   endocrine diseases, metabolic diseases and cancer, including gene
PT   therapy -
XX
PS   Claim 1; Page 88-90; 98pp; Japanese.
XX
CC   The invention comprises the amino acid and coding sequence of a human G
CC   protein-coupled receptor. The DNA and protein sequences of the invention
CC   are useful for developing drugs to prevent or treat (gene therapy):
CC   central nervous system diseases; endocrine diseases; metabolic diseases;
CC   cancer; respiratory diseases; digestive diseases; immune diseases;
CC   inflammations; infections; and circulatory diseases. The present amino
CC   acid sequence represents the human G protein-coupled receptor of the
CC   invention.
XX
SQ   Sequence   337 AA;

  Query Match             27.3%;  Score 477;  DB 23;  Length 337;
  Best Local Similarity   35.9%;  Pred. No. 5.9e-41;
  Matches  110;  Conservative   61;  Mismatches  123;  Indels   12;  Gaps    6;

Qy       8 NATCKNWLAAEAALEKYYLSIFYGIEFVVGVLGNTIVVYGYIFSLKNWNSSNIYLFNLSV 67
Db      23 NCTDEN-----IPLKMHYLPVIYGIIFLVGFPGNAVVISTYIFKMRPWKSSTIIMLNLAC 77

Qy      68 SDLAFLCTLPMLIRSYANG-NWIYGDVLCISNRYVLHANLYTSILFLTFISIDRYLIIKY 126
Db      78 TDLLYLTSLPFLIHYYASGENWIFGDFMCKFIRFSFHFNLYSSILFLTCFSIFRYCVIIH 137

Qy     127 PFREHLLQKKEFAILISLAIWVLVTLELLPILPLINPVITDNGTTCNDFASSGDPNYNLI 186
Db     138 PMSCFSIHKTRCAVVACAVVWIISLVAVIPMTFLITSTNRTNRSACLDLTSSDELNTIKW 197

Qy     187 YSMCLTLLGFLIPLFVMCFFYYKIALFLKQRNRQVATALPLEKPLNLVIMAVVIFSVPFT 246
Db     198 YNLILTATTFCLPLVIVTLCYTTI-IHTLTHGLQTDSCLK-QKARRLTILLLLAFYVCFL 255

Qy     247 PYHVMRNVRIASRLGSWKQYQCT-QVVINSFYIVTRPLAFLNSVINPVFYFLLGDHFRDM 305
Db     256 PFHILRVIRIESRLLS---ISCSIENQIHEAYIVSRPLAALNTFGNLLLYVVVSDNFQQA 312

Qy     306 LMNQLR 311
Db     313 VCSTVR 318


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